Serial No. 10/079,559

AMENDMENTS TO THE DISCLOSURE

Please replace paragraph [0048] with the following amended paragraph:

100481 In the embodiment described above and illustrated in FIGs. 2-4, all of the traffic received by the input interface 4 is transported through two diverse paths 24. That is, SONET traffic is conveyed through path A 24a, while all other traffic traverses path B 24b. It will be appreciated that this provides a comparatively coarse division of traffic. However, more than two diverse paths may be used, if desired, to obtain a finer granularity of traffic separation. Furthermore, in the illustrated embodiment, path A 24a carries only SONET traffic. However, it will be appreciated that other traffic types (all having similarly stringent low latency requirements) may be conveyed through the same path as SONET traffic, with appropriate revisions in the prioritization and fairness classification stages implemented in path A 24a. Alternatively, a separate diverse path 24 can be set up for each low latency traffic type. Thus, for example, a path 24 could be set up and optimized for conveying ATM traffic, independently of SONNET-SONET and IP traffic. Similarly, a path 24 could be set up and optimized for conveying critical mission and management messaging, independently of any other traffic. Alternatively, critical mission and management messaging can be conveyed through the same path 24 as its associated traffic streams (e.g. SONET alarm and protection switching messages can be conveyed through Path A 24a along with the other SONET traffic) and the scheduler 36 controlled to ensure that the critical mission and management messaging has priority over the other traffic within that path 24.